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# PREFACE

Twelve years ago, the world's leading specialists on the epidermis met in Lake Arrowhead, the conference center of the University of California at Los Angeles, for the first symposium on the epidermis. The proceedings of that conference, *The Epidermis*, published in June, 1964, by Academic Press, were characterized not only by the vibrance, wit, omniscience, and wisdom of the late Dr. Stephen Rothman but by massive amounts of new data and a wide range of opinions about the precise mechanism of keratinization. Now, more than a decade later, this second volume on the epidermis reflects the technological progress and vast amounts of new knowledge that have accumulated during the intervening years and the proud accomplishments of the many brilliant practitioners of dermatology in the laboratory as well as in the clinic. Missing are the wisdom and the words of Dr. Rothman, but his spirit dominated the symposium. This issue is not only an updated version of the first volume but an addendum to it; many new names are cited, many new disciplines are represented for the first time. Whereas the editors may lament that so much light has generated too little agreement on basic issues, they are encouraged by the impetus toward that agreement.

The proceedings of the 1974 symposium, held at Salishan on the central Oregon coast, are characterized chiefly by new and exciting ways of combining structure with function and by new insights into the mechanisms of morphogenesis. The current trend toward correlating biochemical events in the epidermis with their ultrastructural basis is exemplified by Kefalides's thorough analysis of the synthesis of the basement membrane. Breathnach's offerings on the freeze-fracture technique make one reflect that when this technique is refined and better understood we will have novel and provocative ways of examining tissues; perhaps with this and other methods, the step-by-step events which give rise to pathologic disturbances of the epidermis will be better clarified than they are now. The reports by Wuepper and Briggaman reflect the growing interest in and importance of the mechanisms of experimental pathology. The recent approach to epidermal pathology is well represented by Tuffanelli, Gilliam, and Jordon who describe the consequences of immunologic attack by antibodies to the structural antigens of the surface of keratinocytes, the basement membranes, and deposits of immune complexes at the dermoepidermal junction.

Whereas the various investigators are much closer than before to unanimity on the origin, chemical composition, and fate of keratohyaline granules, they still exercise their prerogative to disagree about the chemical nature of the granules and the site of origin of the histidine-rich and sulfur-rich proteins. Halprin and Voorhees also differ about the role of cyclic AMP and cyclic GMP in the regulation of epidermal proliferation and differentiation and thereby provide some unusually provocative reading.

In summary, this issue contains one of the most complete progress reports on the current status of our knowledge about the epidermis to appear in twelve years. Perhaps its greatest utility lies in serving as a guide to the many problems that remain to be solved.

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